

WO 00/26350

PCT/US99/25820

SEQUENCE LISTING

<110> INCYTE PHARMACEUTICALS, INC.

TANG, Y. Tom
 CORLEY, Neil C.
 GUEGLER, Karl J.
 GORGONE, Gina A.
 AZIMZAI, Yalda
 KASER, Matthew R.
 YUE, Henry

<120> COENZYME A-UTILIZING ENZYMES

<130> PF-0622 PCT

<140> To Be Assigned

<141> Herewith

<150> 09/185,217; unassigned

<151> 1998-11-03; 1998-11-03

<160> 10

<170> PERL Program

<210> 1

<211> 100

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1580751CD1

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Asn	Val	His	Glu	Lys	Lys	Leu	Gly	Asp	Lys	Val	Ala	Phe	Tyr	Trp
				20					25					30
Pro	Cys	Gln	Arg	Asp	Gln	Asp	Gly	Tyr	Tyr	Trp	Ile	Thr	Gly	Arg
				35					40					45
Ile	Asp	Asp	Met	Leu	Asn	Val	Ser	Gly	Glu	Gly	Gln	Gly	Pro	Pro
				50					55					60
Ser	His	Leu	Ile	Asn	Ser	Ala	Pro	Leu	Thr	Thr	Pro	Ser	Arg	Ser
				65					70					75
Leu	Pro	Gln	Glu	Pro	Arg	Ser	Val	Leu	Trp	Pro	Asp	His	Val	Leu
				80					85					90
Ser	Val	Ala	Phe	Ser	Ser	Gly	Pro	Arg	Phe					
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<210> 2

<211> 159

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<212> PRT

<213> Homo sapiens

<220>

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<223> Incyte ID No: 1627889CD1

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Val	Ser	Arg	Phe	Leu	His	Leu	Gln	Ser	Pro	Phe	Leu	Thr	Gln	Val
				20					25					30
His	Ser	Glu	Gln	Trp	Gln	Leu	Ser	Thr	Ser	Gln	Ile	Pro	Val	Gln
				35					40					45
Gln	Met	His	Leu	Phe	Asp	Val	His	Asn	Tyr	Pro	Asp	Tyr	Val	Ser
				50					55					60
Ser	Gly	Gly	Gly	Phe	Gly	Pro	Ala	Asp	Asp	His	Gly	Tyr	Gly	Val
				65					70					75
Ser	Tyr	Ile	Phe	Met	Gly	Asp	Gly	Met	Ile	Thr	Phe	His	Ile	Ser
				80					85					90
Ser	Lys	Lys	Ser	Ser	Thr	Lys	Thr	Asp	Ser	His	Arg	Leu	Gly	Gln
				95					100					105
His	Ile	Glu	Asp	Ala	Leu	Leu	Asp	Val	Ala	Ser	Leu	Phe	Gln	Ala
				110					115					120
Gly	Gln	His	Phe	Lys	Arg	Arg	Phe	Arg	Gly	Ser	Gly	Lys	Glu	Asn
				125					130					135
Ser	Arg	His	Arg	Cys	Gly	Phe	Leu	Ser	Arg	Gln	Thr	Gly	Ala	Ser
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<211> 215

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1965888CD1

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Ser	Glu	Leu	Leu	Glu	Thr	Leu	Ala	Gln	Leu	Arg	Glu	Asp	Arg	Gln
				20					25					30
Val	Arg	Val	Leu	Leu	Phe	Arg	Ser	Gly	Val	Lys	Gly	Val	Phe	Cys
				35					40					45
Ala	Gly	Ala	Asp	Leu	Lys	Glu	Arg	Glu	Gln	Met	Ser	Glu	Ala	Glu
				50					55					60
Val	Gly	Val	Phe	Val	Gln	Arg	Leu	Arg	Gly	Leu	Met	Asn	Asp	Ile
				65					70					75
Ala	Ser	Ser	Ala	Val	Met	Gly	Leu	Ile	Glu	Thr	Thr	Arg	Gly	Leu
				80					85					90
Leu	Pro	Gly	Ala	Gly	Gly	Thr	Gln	Arg	Leu	Pro	Arg	Cys	Leu	Gly

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	95		100		105
Val Ala Leu Ala	Lys Glu Leu Ile Phe	Thr Gly Arg Arg Leu Ser			
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Gly Thr Glu Ala	His Val Leu Gly Leu	Val Asn His Ala Val Ala			
	125		130		135
Gln Asn Glu Glu	Gly Asp Ala Ala Tyr	Gln Arg Ala Arg Ala Leu			
	140		145		150
Ala Gln Glu Ile	Leu Pro Gln Ala Pro	Ile Ala Val Arg Leu Gly			
	155		160		165
Lys Val Ala Ile	Asp Arg Gly Thr Glu	Val Asp Ile Ala Ser Gly			
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Met Ala Ile Glu	Gly Met Cys Tyr Ala	Gln Asn Ile Pro Thr Arg			
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Asp Arg Leu Glu	Gly Met Ala Ala Phe	Arg Glu Lys Arg Thr Pro			
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Lys Phe Val Gly	Lys				
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<211> 720

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

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Ser Leu Tyr Thr Ile	Leu Thr Tyr Ile Pro	Phe Tyr Phe Phe Ser
	35	40 45
Glu Ser Arg Gln Glu	Lys Ser Asn Arg Ile	Lys Ala Lys Pro Val
	50	55 60
Asn Ser Lys Pro Asp	Ser Ala Tyr Arg Ser	Val Asn Ser Leu Asp
	65	70 75
Gly Leu Ala Ser Val	Leu Tyr Pro Gly Cys	Asp Thr Leu Asp Lys
	80	85 90
Val Phe Thr Tyr Ala	Lys Asn Lys Phe Lys	Asn Lys Arg Leu Leu
	95	100 105
Gly Thr Arg Glu Val	Leu Asn Glu Glu Asp	Glu Val Gln Pro Asn
	110	115 120
Gly Lys Ile Phe Lys	Lys Val Ile Leu Gly	Gln Tyr Asn Trp Leu
	125	130 135
Ser Tyr Glu Asp Val	Phe Val Arg Ala Phe	Asn Phe Gly Asn Gly
	140	145 150
Leu Gln Met Leu Gly	Gln Lys Pro Lys Thr	Asn Ile Ala Ile Phe
	155	160 165
Cys Glu Thr Arg Ala	Glu Trp Met Ile Ala	Ala Gln Ala Cys Phe
	170	175 180
Met Tyr Asn Phe Gln	Leu Val Thr Leu Tyr	Ala Thr Leu Gly Gly
	185	190 195

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Pro	Ala	Ile	Val	His	Ala	Leu	Asn	Glu	Thr	Glu	Val	Thr	Asn	Ile	200	205	210
Ile	Thr	Ser	Lys	Glu	Leu	Leu	Gln	Thr	Lys	Leu	Lys	Asp	Ile	Val	215	220	225
Ser	Leu	Val	Pro	Arg	Leu	Arg	His	Ile	Ile	Thr	Val	Asp	Gly	Lys	230	235	240
Pro	Pro	Thr	Trp	Ser	Glu	Phe	Pro	Lys	Gly	Ile	Ile	Val	His	Thr	245	250	255
Met	Ala	Ala	Val	Glu	Ala	Leu	Gly	Ala	Lys	Ala	Ser	Met	Glu	Asn	260	265	270
Gln	Pro	His	Ser	Lys	Pro	Leu	Pro	Ser	Asp	Ile	Ala	Val	Ile	Met	275	280	285
Tyr	Thr	Ser	Gly	Ser	Thr	Gly	Leu	Pro	Lys	Gly	Val	Met	Ile	Ser	290	295	300
His	Ser	Asn	Ile	Ile	Ala	Gly	Ile	Thr	Gly	Met	Ala	Glu	Arg	Ile	305	310	315
Pro	Glu	Leu	Gly	Glu	Glu	Asp	Val	Tyr	Ile	Gly	Tyr	Leu	Pro	Leu	320	325	330
Ala	His	Val	Leu	Glu	Leu	Ser	Ala	Glu	Leu	Val	Cys	Leu	Ser	His	335	340	345
Gly	Cys	Arg	Ile	Gly	Tyr	Ser	Ser	Pro	Gln	Thr	Leu	Ala	Asp	Gln	350	355	360
Ser	Ser	Lys	Ile	Lys	Lys	Gly	Ser	Lys	Gly	Asp	Thr	Ser	Met	Leu	365	370	375
Lys	Pro	Thr	Leu	Met	Ala	Ala	Val	Pro	Glu	Ile	Met	Asp	Arg	Ile	380	385	390
Tyr	Lys	Asn	Val	Met	Asn	Lys	Val	Ser	Glu	Met	Ser	Ser	Phe	Gln	395	400	405
Arg	Asn	Leu	Phe	Ile	Leu	Ala	Tyr	Asn	Tyr	Lys	Met	Glu	Gln	Ile	410	415	420
Ser	Lys	Gly	Arg	Asn	Thr	Pro	Leu	Cys	Asp	Ser	Phe	Val	Phe	Arg	425	430	435
Lys	Val	Arg	Ser	Leu	Leu	Gly	Gly	Asn	Ile	Arg	Leu	Leu	Leu	Cys	440	445	450
Gly	Gly	Ala	Pro	Leu	Ser	Ala	Thr	Thr	Gln	Arg	Phe	Met	Asn	Ile	455	460	465
Cys	Phe	Cys	Cys	Pro	Val	Gly	Gln	Gly	Tyr	Gly	Leu	Thr	Glu	Ser	470	475	480
Ala	Gly	Ala	Gly	Thr	Ile	Ser	Glu	Val	Trp	Asp	Tyr	Asn	Thr	Gly	485	490	495
Arg	Val	Gly	Ala	Pro	Leu	Val	Cys	Cys	Glu	Ile	Lys	Leu	Lys	Asn	500	505	510
Trp	Glu	Glu	Gly	Gly	Tyr	Phe	Asn	Thr	Asp	Lys	Pro	His	Pro	Arg	515	520	525
Gly	Glu	Ile	Leu	Ile	Gly	Gly	Gln	Ser	Val	Thr	Met	Gly	Tyr	Tyr	530	535	540
Lys	Asn	Glu	Ala	Lys	Thr	Lys	Ala	Asp	Phe	Phe	Glu	Asp	Glu	Asn	545	550	555
Gly	Gln	Arg	Trp	Leu	Cys	Thr	Gly	Asp	Ile	Gly	Glu	Phe	Glu	Pro	560	565	570
Asp	Gly	Cys	Leu	Lys	Ile	Ile	Asp	Arg	Lys	Lys	Asp	Leu	Val	Lys	575	580	585
Leu	Gln	Ala	Gly	Glu	Tyr	Val	Ser	Leu	Gly	Lys	Val	Glu	Ala	Ala	590	595	600
Leu	Lys	Asn	Leu	Pro	Leu	Val	Asp	Asn	Ile	Cys	Ala	Tyr	Ala	Asn			

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	605		610		615
Ser Tyr His Ser	Tyr Val Ile Gly Phe	Val Val Pro Asn Gln	Lys		
	620		625		630
Glu Leu Thr Glu	Leu Ala Arg Lys Lys	Gly Leu Lys Gly Thr	Trp		
	635		640		645
Glu Glu Leu Cys	Asn Ser Cys Glu Met	Glu Asn Glu Leu Leu	Lys		
	650		655		660
Val Leu Ser Glu	Ala Ala Ile Ser Ala	Ser Leu Glu Lys Phe	Glu		
	665		670		675
Ile Leu Val Lys	Ile Arg Leu Ser Pro	Glu Pro Trp Thr Pro	Glu		
	680		685		690
Thr Gly Leu Val	Thr Asp Ala Phe Lys	Leu Lys Arg Lys Glu	Leu		
	695		700		705
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<210> 5

<211> 456

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 3324214CD1

<400> 5

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	20	25	30
Ile Val Pro Ala Ile	Phe Gly Val Ser Phe	Gly Ile Arg Lys Leu	
	35	40	45
Tyr Met Lys Ser Leu	Leu Lys Ile Phe Ala	Trp Ala Thr Leu Arg	
	50	55	60
Met Glu Arg Gly Ala	Lys Glu Lys Asn His	Gln Leu Tyr Lys Pro	
	65	70	75
Tyr Thr Asn Gly Ile	Ile Ala Lys Asp Pro	Thr Ser Leu Glu Glu	
	80	85	90
Glu Ile Lys Glu Ile	Arg Arg Ser Gly Ser	Ser Lys Ala Leu Asp	
	95	100	105
Asn Thr Pro Glu Phe	Glu Leu Ser Asp Ile	Phe Tyr Phe Cys Arg	
	110	115	120
Lys Gly Met Glu Thr	Ile Met Asp Asp Glu	Val Thr Lys Arg Phe	
	125	130	135
Ser Ala Glu Glu Leu	Glu Ser Trp Asn Leu	Leu Ser Arg Thr Asn	
	140	145	150
Tyr Asn Phe Gln Tyr	Ile Ser Leu Arg Leu	Thr Val Leu Trp Gly	
	155	160	165
Leu Gly Val Leu Ile	Arg Tyr Cys Phe Leu	Leu Pro Leu Arg Ile	
	170	175	180
Ala Leu Ala Phe Thr	Gly Ile Ser Leu Leu	Val Val Gly Thr Thr	
	185	190	195
Val Val Gly Tyr Leu	Pro Asn Gly Arg Phe	Lys Glu Phe Met Ser	
	200	205	210

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Lys His Val His	Leu Met Cys Tyr Arg	Ile Cys Val Arg Ala	Leu
215		220	225
Thr Ala Ile Ile	Thr Tyr His Asp Arg	Glu Asn Arg Pro Arg	Asn
230		235	240
Gly Gly Ile Cys	Val Ala Asn His Thr	Ser Pro Ile Asp Val	Ile
245		250	255
Ile Leu Ala Ser	Asp Gly Tyr Tyr Ala	Met Val Gly Gln Val	His
260		265	270
Gly Gly Leu Met	Gly Val Ile Gln Arg	Ala Met Val Lys Ala	Cys
275		280	285
Pro His Val Trp	Phe Glu Arg Ser Glu	Val Lys Asp Arg His	Leu
290		295	300
Val Ala Lys Arg	Leu Thr Glu His Val	Gln Asp Lys Ser Lys	Leu
305		310	315
Pro Ile Leu Ile	Phe Pro Glu Gly Thr	Cys Ile Asn Asn Thr	Ser
320		325	330
Val Met Met Phe	Lys Lys Gly Ser Phe	Glu Ile Gly Ala Thr	Val
335		340	345
Tyr Pro Val Ala	Ile Lys Tyr Asp Pro	Gln Phe Gly Asp Ala	Phe
350		355	360
Trp Asn Ser Ser	Lys Tyr Gly Met Val	Thr Tyr Leu Leu Arg	Met
365		370	375
Met Thr Ser Trp	Ala Ile Val Cys Ser	Val Trp Tyr Leu Pro	Pro
380		385	390
Met Thr Arg Glu	Ala Asp Glu Asp Ala	Val Gln Phe Ala Asn	Arg
395		400	405
Val Lys Ser Ala	Ile Ala Arg Gln Gly	Gly Leu Val Asp Leu	Leu
410		415	420
Trp Asp Gly Gly	Leu Lys Arg Glu Lys	Val Lys Asp Thr Phe	Lys
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Glu Glu Gln Gln	Lys Leu Tyr Ser Lys	Met Ile Val Gly Asn	His
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Lys Asp Arg Ser	Arg Ser		
455			

<210> 6

<211> 687

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> 63

<223> a or g or c or t, unknown, or other

<220>

<221> misc_feature

<223> Incyte ID No: 1580751CB1

<400> 6

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cgaggtcagc cgctccgcgc acgtcccctc gctgcagcgc taccgcgagc tgcaccggcg 180
ctccgtggag gagccgcggg aattctgggg agacattgcc aaggaatttt actggaagac 240

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tgagaaaaag cttggagata aagttgcttt ttactggcct tgccagcggg accaggatgg 420
ctattactgg atcaactggca ggattgatga catgctcaat gtatctggtg agggccaggg 480
gccaccttcc catcttatta actctgctcc tctgacaaca cccagccgaa gccttccgca 540
agagcccagg agtgtccttt ggccagacca tgtactaagt gtagcattca gttctggggc 600
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<210> 7

<211> 1803

<212> DNA

<213> Homo sapiens

<220>

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<223> Incyte ID No: 1627889CB1

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gtgctcagac taaagctttt ctttatacgg gggttcatgt tggtaaaaat ccattgaatt 180
atatacgtag gatttttgaa cttatttcta taaagtttta tatttcaata aaaagcttaa 240
agatatatat atattatttt ccatacatga caagtattgt atcatatata ctatttttga 300
acttattcct ataaaatggt atatttcaat aaaaactgac agatatatta cattattttc 360
catccatgac aagtattatt atatcataca tgctattttt tttttttttt ttttttttga 420
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aatgacatcc accgacttct gactccttcc agcaggcagc tggcctctcc aaggaataag 1680
ggtgaaattg ccacagctgg ctgacacagg acaggggcaa ctggtttggc aacccacat 1740
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<210> 8

<211> 1340

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<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1965888CB1

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gcgggtccgg accaagttta caagtccttc cactttctct ctgaggcaga aagagcaagg 180
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ccccagcccc cagcccagga ttaggcagag ccagctgctt tcccgaggct gccctgactc 360
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cggaacaga tgaagtgaagc agaggtgggg gtgtttgtcc agcgactccg gggcctgatg 600
aatgacatcg cttcctcggc agtcatggga ctgattgaga ccacgcgagg gtcctcccg 660
ggggcaggag ggactcagag gctgccccgt tgtctggggg tggccctggc gaaggagctc 720
atcttcacgg gccgacgact gagtggaaact gaggccacg tactggggct ggtgaatcac 780
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<210> 9

<211> 4027

<212> DNA

<213> Homo sapiens

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<223> Incyte ID No: 2816341CB1

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gggcggcggc gcggggcgtg aacgctctgg ggctcagcca ggctgcgcg gggccgatgc 180
cggaggaacc cggactccgg cgtagcggtt ttgacacaag ggcgcataat tcaaaagcac 240
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tatattttat acattttcta atatcacttt atactatttt aacatacatt cgtttttatt 540
ttttctccga gtcaagacaa gaaaaatcaa accgaattaa agcaaagcct gttaaattcaa 600
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gactcttggg	aacacgtgaa	gttttaaata	aggaagatga	agtacaacca	aatggaaaaa	780
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